

## **REMARKS**

The time and courtesy of Examiner Nooristany in the course of a telephonic interview on 10 December 2009 with attorney Edward Callan is sincerely appreciated. The matters discussed during the interview included the Response to Arguments set forth in the Office Action of September 30, 2009, a proposed amendment of claims 13-16 to meet the rejection thereof under Section 112, second paragraph, and the rejection of claims 13-16 under 35 U.S.C. 103. No agreement was reached as to the allowability of any of the claims.

### **Claim Rejections - 35 U.S.C. 112**

The rejection of claims 13-16 under 35 U.S.C. 112, second paragraph, is met by the amendment of these claims to provide an antecedent basis for the recitation of “executable programs” by revising these claims to recite: “wherein when executable programs are sent as attachments to e-mails”. A correlation of these claims with claim 9 is provided by the recitation of “an incoming email” in claim 9, from which all of claims 13-16 ultimately depend.

### **Claim Rejections - 35 U.S.C. 103**

The rejection of claims 9-17 and 25-28 under 35 U.S.C. 103(a) (claims 26-18 are cancelled) as being unpatentable over US patent 6,249, 805 to Fleming, in view of US patent No. 5,999,967 to Sundsted, is respectfully traversed for at least the following reasons:

Referring to MPEP 2111, the first main heading is: “Claims Must Be Given Their Broadest Reasonable Interpretation.” However, that leaves out some very important qualifying words, which appear in the first sentence of this section: “consistent with the specification.” Therefore, there are two very important concepts that govern how examiners must approach the understanding of the claims under examination. They are that the interpretation must be *reasonable*, and that the interpretation must be *consistent with the specification*.

Here the Examiner has applied the Fleming reference to the limitations of lines 1-9 of claim 9, and has sought to find obviousness based on the teachings of Sundsted with respect to the limitations in lines 10-13 of that claim.

The Examiner's overly broad and clearly erroneous interpretation of the last paragraph of claim 9, that is necessary to support his rejection of these claims is not a *reasonable* interpretation of the plain language of the terms of the claims that is *consistent with the Specification* of the present application, as required by MPEP 2111 and 2111.01.

The last paragraph of claim 9 recites:

“performing an analysis to see if there is serial, incremental user identification occurring so that conclusions can be drawn concerning automatic attempts at breaking into the e-mail system”.

The relevant portion of the Specification that supports the last paragraph of claim 9 is the paragraph at page 3, lines 15-19 (paragraph 0016 of the published application), which states:

“On the other hand, the e-mail can be analyzed to see if there is serial, incremental user identification occurring, which would enable inferences to be drawn concerning automatic attempts at breaking into the e-mail system. This additional analysis makes it possible to very easily identify malicious individuals who automatically try all possible codes.”

The last paragraph of claim 9 and the relevant portion of the Specification require both

- that the analysis is to see if there is serial, incremental user identification occurring, and
- that the occurrence of serial, incremental user identification enables conclusions to be drawn concerning automatic attempts at breaking into the e-mail system.

In the system disclosed by Sundsted, a received e-mail is accompanied by an electronic stamp. The electronic stamp includes a Serial Number Field 40, a Value Field 41, a Date Field 42, a Hash Field 43, a Receiver Address Field 44, a Sender Address

Field 45, an Identification Field 46, and a Signature Field 47, as shown in FIG. 4. At column 7, line 1 to column 8, line 24, Sundsted discloses that:

The Serial Number Field 40 holds *the serial number of the electronic stamp*. This number is issued by the sending system. A serial number must never be reissued. *The simplest serial number generator is a counter that is incremented for each electronic stamp generated.*

Value Field 41 holds the amount the sender agrees to pay the receiver if the receiver accepts the electronic mail....

Date Field 42 holds the creation date of the electronic stamp.

Hash Field 43 holds a value computed from the contents of the body of the electronic mail....

Receiver Address Field 44 *holds the address of the receiver* of the electronic mail.

Sender Address Field 45 *holds the address of the sender* of the electronic mail.

The values in Hash Field 43, Receiver Address Field 44, and Sender Address Field 45 serve to bind the electronic stamp to a piece of electronic mail. Without this information, a malicious party could intercept the electronic mail, remove the electronic stamp, and place it on another electronic mail.

Identification Field 46 *holds the identification number of the sending system*. Each sending system will be issued a unique identification number.

Signature Field 47 holds the digital signature of the electronic stamp. The digital signature may be computed using any secure digital signature algorithm...

Once it assembles the values in Serial Number Field 40, Value Field 41, Date Field 42, Hash Field 43, Receiver Address Field 44, Sender Address Field 45, and Identification Field 46, the sending system generates the digital signature of the electronic stamp and signs the electronic stamp with it. Without this digital signature, a malicious party could forge an electronic stamp claiming to be from any sender in the electronic mail system.

....

Analysis Module 23 *reads the identity of the sending system from Identification Field 46* and the digital signature from Signature Field 47. It

verifies the identity of the sending system and the integrity of the electronic stamp by testing the digital signature. If the digital signature fails the test, this is a sure indication that either the electronic stamp has been corrupted or tampered with, or someone other than the sender created the electronic stamp. In either case, the electronic stamp and the associated electronic mail should be rejected.

Analysis Module 23 reads the hash value from the Hash Field 43. It compares this value with the value it calculates from the body of the electronic mail. If the comparison fails, this is a good indication that either the electronic mail has been corrupted or the electronic stamp is no longer attached to the original piece of electronic mail. In either case, the electronic stamp and the associated electronic mail should be rejected.

Analysis Module 23 reads the *address of the receiver from Receiver Address Field 44*, and the *address of the sender from Sender Address Field 45*. It then compares these values with the appropriate parts of the electronic mail. If the comparison fails, this is a good indication that either the electronic mail has been corrupted or the electronic stamp is no longer attached to the original piece of electronic mail. In either case, the electronic stamp and the associated electronic mail should be rejected.

Analysis Module 23 reads the *serial number [of the electronic stamp] from Serial Number Field 40*. It then checks History Log 25 to see if this electronic stamp has been received before. If the electronic stamp is found in History Log 25, this is a good indication that the electronic mail has been delivered multiple times, either due to a fault in the electronic mail system or due to malicious intent. In either case, the electronic stamp and the associated electronic mail should be rejected. (Emphasis added to the above quoted paragraphs from Sundsted.)

The analyses performed by Sundsted's Analysis Module 23 are quite different from the analysis recited in the last paragraph of claim 9, which requires (a) that the analysis is to see if there is serial, incremental *user identification* occurring, and (b) that the occurrence of serial, incremental *user identification* enables conclusions to be drawn concerning automatic attempts at breaking into the e-mail system.

The Examiner, in contravention of the applicable MPEP instructions, has unreasonably interpreted the plain language of the terms recited in the last paragraph of claim 9 broadly enough to support his erroneous conclusion that the analysis elements recited in this paragraph are taught by Sundsted. It appears from the Examiner's "Response to Arguments" in the Office Action of 30 September 2009 that the Examiner is asserting that Sundsted teaches "performing an analysis to see if there is serial, incremental user identification occurring so that conclusions can be drawn concerning automatic attempts at breaking into the e-mail system," as recited in the last paragraph of claim 9, for the reason that Sundsted's Analysis Module 23 reads from Serial Number Field 40 the *serial number* of the electronic stamp that is generated in each individual sending system by a counter that is *incremented for each electronic stamp generated*, and then checks History Log 25 to see if this electronic stamp has been received before, whereby if the electronic stamp is found in History Log 25, this is a good indication that the electronic mail has been delivered multiple times, either due to a fault in the electronic mail system or due to malicious intent, and because the electronic stamp also includes Identification Field 46 that *holds the identification number of the sending system*.

This assertion by the Examiner is not based upon a reasonable interpretation of the plain language of the terms of the claims and is not consistent with the Specification of the present application for at least the following reasons:

- Sundsted's Analysis Module 23 does not see if serial, incremental *user identification* is occurring, as required by the plain language of the last paragraph of claim 9. User identification is provided by the Receiver Address Field 44, the Sender Address Field 45 and the Identification Field 46, but not the Serial Number Field 40, which is the only field from which the Analysis Module 23 can see if any type of serial, incremental identification is occurring.
- Analysis Module 23 of Sundsted reads the *address of the receiver from Receiver Address Field 44*, and the *address of the sender from Sender Address Field 45*, and then compares these values with the appropriate parts of the electronic mail. Analysis Module 23 does not see if either serial, incremental *receiver address identification*, or serial, incremental *sender address identification*, is occurring.

- The only processing by Analysis Module 23 of Identification Field 46 is to read the identity of the sending system from Identification Field 46.
- The *only occurrence* of serial, incremental identification that is seen by Analysis Module 23 is the occurrence of serial, incremental *electronic stamp identification* that is seen by Analysis Module 23 whenever emails accompanied by electronic stamps having consecutively generated serial numbers are consecutively received from the same email sending system.
- Such an occurrence of serial, incremental *electronic stamp serial number identification* is *not* an *irregular* occurrence that causes Analysis Module 23 to reject the email, such as happens whenever the serial number of the electronic stamp is the same as the serial number of a previously received electronic stamp that has been stored in History Log 25.
- Such an occurrence of serial, incremental *electronic stamp serial number identification* does *not* enable a conclusion to be drawn concerning automatic attempts at breaking into the e-mail system, as required by the last paragraph of claim 9. Furthermore, any conclusion that could be drawn from such an occurrence concerning automatic attempts at breaking into the e-mail system would *not* be consistent with the relevant portion of the Applicant's Specification, which states:

“the e-mail can be analyzed to see if there is serial, incremental *user identification* occurring, which would enable inferences to be drawn concerning automatic attempts at breaking into the e-mail system. This additional analysis makes it possible to very easily identify malicious individuals who automatically try all possible codes ” (emphasis added) (paragraph [0016]).

An attempt in which all possible codes are tried is a type of attempt that can be identified by the occurrence of serial, incremental *user identification*, from which conclusions can be drawn concerning automatic attempts at breaking into the e-mail system by automatically, serially, incrementally changing the user identification until the changed user identification matches an authorized user identification.

- Sundsted's Analysis Module 23 will *not* see that serial, incremental *electronic stamp identification* is occurring either (1) whenever consecutively received emails bearing electronic stamps are received from different email sending systems, (2) whenever emails bearing electronic stamps having consecutively generated serial numbers are not received consecutively, or (3) whenever emails bearing the same electronic stamp are received from the same email sending system.
  - The first and second cases are *regular* occurrences that do not enable a conclusion to be drawn concerning automatic attempts at breaking into the e-mail system.
  - Although the third case is an *irregular* occurrence that enables a conclusion to be drawn in accordance with Sundsted's teaching that the electronic mail has been delivered multiple times, either due to a fault in the electronic mail system or due to malicious intent, the third case is not an occurrence of serial, incremental *user* identification that enables a conclusion to be drawn concerning automatic attempts at breaking into the e-mail system, as required by the last paragraph of claim 9. Furthermore, any conclusion that could be drawn from the third case concerning automatic attempts at breaking into the e-mail system would be *inconsistent* with the relevant portion of the Specification, which is quoted above.

Thus, it must be concluded that Sundsted does not teach either (a) an analysis to see if serial, incremental *user* identification is occurring or (b) that it is when serial, incremental *user* identification is occurring that a conclusion can be drawn that there is an automatic attempt at breaking into the e-mail system, as required by the last paragraph of claim 9.

The Examiner is respectfully requested to either withdraw this rejection or to specifically point out any fallacy in the foregoing arguments.

Remaining claims 10-17 and 25 ultimately depend from claim 9 and thereby are believed to be patentable for at least the same reasons as stated above for the allowance of claim 9.

The rejection of claims 13-16 under 35 U.S.C. 103(a) as being unpatentable over Fleming in view of Sundsted, and further in view of US Patent Application Publication No. 200400654498 by Shipp is respectfully traversed for at least the following reasons:

Claims 13-16 ultimately depend from claim 9 and thereby are patentable for at least the same reasons as stated above for the allowance of claim 9.

In addition to the recitations in claim 9, each of dependent claims 13-16 further recites,

“wherein when executable programs are sent as attachments to e-mails, all said executable programs are automatically separated in the JMB.”

Shipp was cited as teaching that “it is well known to have system wherein all executable programs sent as attachments to e-mails are automatically separated.” However, Shipp does *not* teach or suggest that *all* attached executable programs sent as attachments to e-mails are automatically separated, as required by claims 13-16.

Shipp teaches that emails having various identifiable characteristics, including attached executable programs, are stopped. At paragraphs 133-138 Shipp further states:

[0133] The stopper 25 takes signatures from the searcher 24. The signature identifies characteristics of emails which must be stopped. On receiving the signature, all future matching emails are treated as viruses, and stopped.

[0134] Obviously, the stopping action can take a number of forms, including

[0135] Disposing of the infected emails without sending them to their addressed recipients.

[0136] Holding them in temporary storage and notifying the addressee by email that an infected message has been intercepted and is being held for a period for their retrieval, should they wish, otherwise it will be deleted.

[0137] Disinfecting the email by removing the virus threat by any suitable means; for example if the virus is an executable attachment, it can be detached or disarmed before forwarding the email to its addressees. The email may be modified by the inclusion of a text message saying that the email has been disinfectd.

[0138] Where a virus is detected, an automated mail server 30 may notify other sites of the relevant characteristics of the infected emails, either to alert human operators or to supply embodiments of the invention at remote sites with the characteristics of the emails necessary for their stoppers 25 to stop them.

Claims 13-16 do *not* recite that an *email* having an executable program attachment *is separated* in the JMB. The reasonable interpretation of the plain language of each of these claims is that *all executable programs* that are *attached* to emails *are separated* from the emails in the JMB.

Shipp's only teaching of an executable program being separated from an email is in paragraph 0137, in which it is stated: "if the virus is an executable attachment, it can be detached or disarmed before forwarding the email to its addressees." This teaching does not suggest that *all* said executable programs are *automatically* separated, as required by each of claims 13-16.

The Examiner is respectfully requested to either withdraw this rejection or to specifically point out any fallacy in the foregoing argument.

The rejection of 17-20 as being unpatentable under 35 U.S.C. 103(a) over Fleming in view of Sundsted, further in view of US Patent Application Publication No. 20040054733 (Weeks), is respectfully traversed for at least the reason that these claims ultimately depend from claim 9, whereby remaining claim 17 (claims 18-20 are cancelled) is patentable for at least the same reasons as stated above for the allowance of claim 9.

The rejection of claim 21-24 as being unpatentable under 35 U.S.C. 103(a) over Fleming in view of Sundsted, further in view of US patent 7,072,944 to Lalonde, and further in view of Shipp, is respectfully traversed for at least the reason these claims ultimately depend from claim 9, whereby remaining claim 21 is patentable for at least the same reasons as stated above for the allowance of claim 9. The additional references fail to supply the teachings which are missing in Fleming and Sundsted and have been pointed out in detail above.

### **New Claims**

New independent claims 29 and 34 are supported by the disclosure in the last paragraph of claim 9 and the relevant portion of the Specification recited at page 3, lines

15-19 (paragraph 0016 of the published application) and are believed to be allowable for at least the same reasons as stated above for the allowance of claim 9.

New claims 30 and 35 depend, respectively, from new claims 29 and 34 and recite the same subject matter as recited in claims 13-16 and thereby are allowable for at least the same reasons as stated above for the allowance of claims 13-16.

New claims 31 and 36 depend, respectively, from new claims 29 and 34 and recite the same subject matter as recited in claim 17 and thereby are allowable for at least the same reasons as stated above for the allowance of claim 17.

New claims 32 and 37 depend, respectively, from new claims 29 and 34 recite the same subject matter as recited in claim 21 and thereby is allowable for at least the same reasons as stated above for the allowance of claim 21.

New claim 33 depends from new claim 29 and recites the same subject matter as recited in claim 25 and thereby is allowable for at least the same reasons as stated above for the allowance of claim 25.

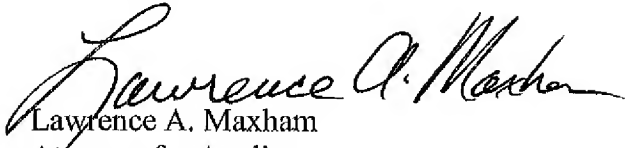
## **Conclusion**

Reconsideration and allowance of all the claims in this application are respectfully requested. Should any issues remain unresolved Examiner Nooristany is invited to contact the undersigned attorney.

Respectfully submitted,

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